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Interview: Lessons Learned From The Pandemic And Five Strategies For Medtech's Recovery

by Marion Webb

In an interview with *Medtech Insight*, two Ernst & Young health care leaders outline five trends for medtech companies to redefine their business models in response to COVID-19.

While the COVID-19 pandemic is far from over, the global disruption it has caused will drive many health care organizations to rethink their business model.

That's the assessment of Ernst & Young health care leaders Pamela Spence and Jim Welch. They foresee a massive shift toward an increasing reliance on data-driven, connected digital technologies, rising collaboration among various stakeholders, and the need to redesign and potentially localize supply chains.

Switzerland-based Spence, who is Ernst & Young's health sciences and wellness industry leader, and Chicago-based Welch, the firm's global medtech leader, discussed with *Medtech Insight five trends that are driving the emergence of the personalized health care system* (based on Spence's report) and how they can be applied to medtech companies' COVID-19 recovery efforts.

"The coronavirus crisis has shown us that there is a willingness of stakeholders to adopt and adapt traditional ways of working at a scale we haven't seen before," Spence said. "Companies that start embracing the technology and data strategy at its core of their business structure – rather than something that they should also do – are going to be the winners in the future."

The Collaborative Ecosystem

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PAMELA SPENCE, EY GLOBAL HEALTH SCIENCES AND WELLNESS LEADER Source: Ernst & Young

Spence's report says the volume of health care data will grow at a compound annual growth rate of 36% by 2025, driven in large part by advancements in big data analytics tools and increasing availability of real-time data.

Much of that data currently exists in siloes and only offers a snapshot of a person's health. The integration of data will allow organizations to gain a better understanding of a person's health, outlook and challenges.

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intrusive - behavioral activities." - Jim Welch

Spence noted that the global effort to contain COVID-19 has shown that health data is exponentially more powerful if it can be collected, combined and shared.

She pointed to the South Korean government's approach of using personal data to trace coronavirus infection routes. The authorities there legally used cellphone data, credit card histories and surveillance cameras to trace infection routes, then shared the data via cellphone alerts with its citizens.

Contact-tracing apps are also becoming a key part in the effort to contain COVID-19 – including in China, Taiwan and Israel – but have also raised privacy concerns.

Contact tracing "is going to be an interesting telltale sign of consumer and patient adoption into even more interactive – some might call it intrusive – behavioral activities," Welch said, adding that medtech and diagnostics companies are "right in the center of these activities."

Welch explained that the value of data will increase or decrease based on how effectively companies can work with other stakeholders and their data to help drive better outcomes.

"I think that is where we're going to see folks continue to apply more focus and obviously coming out of a crisis, you're going to have companies that will outperform and some that are going to underperform," he said. "We believe the ones that are going to outperform are the ones that are more focused on their data in the context of the ecosystem on how it drives outcomes in a

personalized health care world."

In medtech, there are already good examples of value and payment being provided through data-driven platforms, Welch said.

"Whether it's nontraditional companies coming in to provide algorithms and other technologies to support medtechs, or collaborations with payers and providers, we will see more of that," he said.

Embedding Data-Generating Technologies Into The Care Paradigm

Technologies such as 5G-powered telehealth and virtual triage, sensors that track people's movements to monitor social distancing, and AI-assisted drug discovery efforts have played a key role during the COVID-19 pandemic, and Spence expects that trend accelerate.

"Together, these technologies offer a powerful emerging new network that will form a key part of the future ecosystem for health care," Spence said. Many medtech companies are already well positioned in this paradigm, given their adoption of key components such as connected devices, using data, sensors and AI-driven technologies, Welch said.

"I think the transition that the medtech industry has undergone over the last few years from, 'How can I monetize the data that's on my devices for my own benefit?' to evolving into 'How is the data that is accessible via my devices and my therapies important in the overall ecosystem?'" Welch said. "It gets much further into personalized medicine, and I think the COVID crisis has really highlighted the need to collaborate and connect."

"I think that governments around the world are quite astonished at the compliance that people have had around self-isolation and around social distancing." – Pamela Spence

During this crisis, medtech companies have been working much more actively with other health care organizations using telehealth and remote monitoring tools to diagnose and care for patients.

The skyrocketing demand of telehealth, especially in the US, during the crisis has been driven in large part by the removal of regulatory barriers.

Welch said that based on surveys with patients and physicians – and anecdotal evidence with clients working on telehealth – it looks like health systems, physicians, patients and payers are

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all in favor of continued expansion of telehealth.

"I do believe the [telehealth] trend will continue, and consumers and providers probably want a lot of these regulations altered permanently," Welch said.

Incorporating Behavioral Science Into Products And Services

Spence said there is universal consensus that behavior is a critical factor in health outcomes, which has drawn many digital start-ups trying to figure out how to analyze and influence behavior patterns. Several companies have developed successful products, especially in the diabetes sector.

"But the ones I call 'valuable' have behavioral science and design at their core," Spence said. The problem today is

Telemedicine Is Riding High, Hopes For More Provisions In 'Phase Three' COVID-19 Stimulus Package

By Marion Webb

25 Mar 2020

The nation's leading telehealth advocate group expects CMS will provide additional support for telemedicine to help curb the spread of COVID-19.

Read the full article here

that many products are not designed with the user experience and user interface in mind. Done right, some apps have shown success in changing people's behavior.

Virta Health, which offers a medical clinic for people with type 2 diabetes, claims it has seen sustained reversal in type 2 diabetes in 60% of patients who completed treatment in one year.

Spence believes the pandemic has proven that certain behaviors can be quite effective.

"I think that governments around the world are quite astonished at the compliance that people have had around self-isolation and around social distancing," Spence said. "One of the greatest success stories is how individual countries around the world had, to a large extent, at the right point and time, been able to change the population behavior at a scale which is unprecedent."

Spence proposes that organizations build integrated solutions into their products and services that "nudge" people into making better choices to improve their health. To do that, organizations must collaborate to design new payment models that reward for better management of health and wellness, incorporate behavioral science into the design of products and services, and work to build patient engagement with behavior-change solutions.

Enabling Stakeholder Trust

The pandemic has led to rising collaboration among researchers, accelerated the development of tests and vaccines, and led regulators to ease restrictions on manufacturing inspections, product approvals and clinical trials. (Also see "<u>Device Week, 22 May 2020 – Inside FDA's Plan To Restart</u>

On-Site Inspections" - Medtech Insight, 22 May, 2020.)

The challenge, Spence said, will be how to maintain that level of collaboration and trust.

"To share data, you need to trust the other party's data security, and cyber protection is currently a serious unmet need across the sector," Spence said in her report. Today, organizations can opt not to declare known vulnerabilities associated with connected technologies, but the US Food and Drug Administration has suggested tighter control in the future. (Also see "Industry Optimistic About Second CDS Draft Guidance; FDA Releases More Final Software Guidances" - Medtech Insight, 26 Sep, 2019.)

Last year the FDA issued guidance to a new approach of regulating AI, where "trusted" companies will be allowed to launch unlocked algorithms while collaborating with the agency on monitoring these products' performance. Companies that thrive in this collaborative trust-based environment will have a huge advantage, Spence wrote.

Adapting Business Models

With the global economic impact of the COVID-19 pandemic, organizations will be facing evertighter capital constraints, which will make it imperative to move toward a more focused business model, Spence's report says. She sees a trend toward specialization.



JIM WELCH, EY GLOBAL MEDTECH LEADER Ernst & Young

Spence said the big challenge for life science and medtech companies will be to answer two fundamental questions. The first is, "Who will be my customer moving forward?"

"Traditionally they've been health care professionals, but is it going to be the patient as well?" Spence asked.

And second, companies will need to decide whether they want to be "breakthrough innovators," developing the diagnostics, drugs, vaccines and medical devices required to address emerging threats, or whether they want to be "disease managers," developing services around a product.

During the crisis, disease managers have played a key role by offering products that allow health providers to track, monitor and coach patients with chronic

diseases often through remote-monitoring tools.

The challenge post-COVID for many organizations will be to identify which business model they can best employ.

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"You can be either – I don't think you can be both," Spence said.

Further, companies will also look more closely at their supply chains and overall operations, which in many cases have been significantly disrupted during this crisis, to try and find ways to respond more quickly to demands, Welch said. On the commercial side, firms will incorporate more digital tools, such as virtual training, to engage with clients. One example would be to use digital-training tools to teach surgeons how to use devices, such as a new implant.

The Rise Of Digital – Deloitte Offers COVID-19 Recovery Strategies For Medtechs

By Marion Webb

22 Apr 2020

Telemedicine and other digital tools should be a key part of post-pandemic coping strategies for medtech companies, says Deloitte.

Read the full article here

Welch said that during a recent

roundtable with hospital CEOs, it became apparent that in the future, hospitals will have tighter restrictions on physical interactions with health care providers, which is a major departure from the past.

"You're talking about large-scale transformations that are going to have to take place," Welch said. "There are already technology companies lining up to help them affect that change."